

ABSTRACT OF THE DISCLOSURE

Disclosed is a method of manufacturing a photomask, comprising calculating a pattern area ratio, which is a ratio of the light transmitting pattern portion or the light shielding pattern portion to an area of the photomask from the design data of a given layout pattern of the photomask, and a pattern density, which is a ratio of the light transmitting pattern portion or light shielding pattern portion within the region to the area of the region extracted from the given layout pattern, estimating from the calculated pattern area ratio and the pattern density the size of a pattern formed in the case where the pattern is formed on the photomask by using the design data of the given layout pattern, and imparting the amount of correction to the design data of the given layout pattern based on the estimated pattern size.